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Customer Number

Patent
Case No.: 58947US002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor:	JING, NAIYONG		
Application No.:	10/681909	Group Art Unit:	Unknown
Filed:	October 9, 2003	Examiner:	Unknown
Title:	METHOD OF MODIFYING A FLUOROPOLYMER AND ARTICLES THEREBY		

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF MAILING
I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on:
Jan. 9, 2004 — Angie Zontelli
Date — Signed by: Angie Zontelli

Dear Sir:

Pursuant to 37 CFR §§ 1.56, 1.97, and 1.98, enclosed is a completed Form PTO-1449, citing references submitted for consideration by the Examiner. Copies of any cited foreign patents, non-patent literature, and unpublished US application documents are enclosed. Pursuant to the waiver in the Pre-OG Notice, dated July 11, 2003, copies of US patents and published US patent applications are no longer required and are not enclosed. It is respectfully requested that the Examiner initial and return the enclosed Form PTO-1449 to indicate that each reference has been considered.

It is believed that no fee is due; however, in the event a fee is required, please charge the fee to Deposit Account No. 13-3723.

Respectfully submitted,

Jan. 9, 2004
Date

By: Bradford B. Wright
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Office of Intellectual Property Counsel
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Substitute for form 1449A/PTO (modified)		Application Number	10/681909
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U.S. Patent Documents

Exam. Init.*	Cite No.	Document Number Doc. Number-(Kind Code if Known)	Publication Date or Issue Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	US- 3376278	04/02/1968	Morgan et al.	
	A2	US- 4164463	08/14/1979	Fang	
	A3	US- 4186084	01/29/1980	Fang	
	A4	US- 4192764	03/11/1980	Madsen	
	A5	US- 4233421	11/11/1980	Worm	
	A6	US- 4261800	04/14/1981	Beckenbaugh et al.	
	A7	US- 4338237	07/06/1982	Sulzbach et al.	
	A8	US- 4567241	01/28/1986	Kitchens et al.	
	A9	US- 4613653	09/23/1986	Kitchens et al.	
	A10	US- 4775449	10/04/1988	Dumas et al.	
	A11	US- 4824692	04/25/1989	Gillick et al.	
	A12	US- 4912171	03/27/1990	Grootaert et al.	
	A13	US- 5051312	09/24/1991	Allmer	
	A14	US- 5075427	12/24/1991	Kang et al.	
	A15	US- 5086123	02/04/1992	Guenthner et al.	
	A16	US- 5262490	11/06/1993	Kolb et al.	
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	A19	US- 5320789	06/14/1994	Nishii et al.	
	A20	US- 5358775	10/25/1994	Horn, III	
	A21	US- 5419968	05/30/1995	Okada et al.	
	A22	US- 5470617	11/28/1995	Nishii et al.	
	A23	US- 5478652	12/26/1995	Grootaert et al.	
	A24	US- 5580616	12/03/1996	Niino et al.	
	A25	US- 5656121	08/12/1997	Fukushi	
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	A27	US- 5734085	03/31/1998	Coggio et al.	
	A28	US- 5859086	01/12/1999	Freund et al.	

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	A29	US- 5882466	03/16/1999	Grooaert et al.	
	A30	US- 6080487	06/27/2000	Coggio et al.	
	A31	US- 6117497	09/12/2000	Murahara et al.	
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	A33	US- 6197383 B1	03/06/2001	Jing et al.	
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	A45	US-			
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Foreign Patent Documents

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	B1	EP	0 769 517 A1	04-23-1997	Hiraoka et al.		
	B2	WO	96/05965 A1	02-29-1996	Fukushi		
	B3	WO	01/89827 A1	11-29-2001	Wong et al.		
	B4	WO	02/087551 A1	11-07-2002	Coleman et al.		
	B5	WO	02/092722 A1	11-21-2002	Coleman et al.		

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OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS		
Exam. Init.*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
	C1	Allmer et al., "Photochemical Modification of a Fluoropolymer Surface", Macromolecules, 1991, 24, pp. 5487-5488
	C2	Barker et al., "The Electrochemical Reduction of Polytetrafluoroethylene," Electrochimica Acta, 1978, Vol. 23, pp. 1107-1110
	C3	Brewis et al., "Reactions of Polytetrafluoroethylene with Electrochemically Generated Intermediates", Die Angewandte Makromolekulare Chemie, 43, 1975, pp. 191-194 (Nr. 659)
	C4	Brewis, "SURFACE ANALYSIS AND PRETREATMENT OF PLASTICS AND METALS", Applied Science Publishers, NY, 1982, pp. 1-11
	C5	Burdeniuc et al., "Mineralization of Chlorofluorocarbons and Aromatization of Saturated Fluorocarbons by a Convenient Thermal Process", Science, Vol. 271, 19 January 1996, pp. 340-341
	C6	Burdeniuc et al., "New Reaction of Saturated Fluorocarbons: Partial Reduction by NH3 with Hg Photosensitization", J. Am. Chem. Soc., 1995, 117, pp. 10119-10120
	C7	Burggraaf, "Pick Your Plastic Pipe Carefully - Chemicals, even water, can degrade some plastics", Semiconductor International, July 1988, pp. 54-58
	C8	Clark et al., "Surface Modification by Plasma Techniques. I. The Interactions of a Hydrogen Plasma with Fluoropolymer Surfaces", Journal Polym. Sci., Polym. Chem. Ed., 1987, Vol. 25, pp. 2643-2664
	C9	Cooper et al., "Theoretical Studies of Fluorocarbons - Part III. Primary, Secondary, Tertiary and Quaternary Centres", Journal of Fluorine Chemistry, 49, 1990, pp. 421-432
	C10	Kaprinidis et al., "Photosensitized Defluorination of Saturated Perfluorocarbons", Pergamon, Tetrahedron Letters, Vol. 37, No. 14, pp. 2373-2376, 1996
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	C12	Marsella et al., "Selective Reduction of Saturated Perfluorocarbons", J. Org. Chem., 1992, 57, pp. 2856-2860
	C13	Niino et al., "Surface modification and metallization of fluorocarbon polymers by excimer laser processing", Appl. Phys. Lett., 63, (25), 20 December 1993, pp. 3527-3529
	C14	Révész et al., "Excimer laser induced surface chemical modification of polytetrafluoroethylene", Elsevier, Applied Surface Science 109/110, 1997, pp. 222-226
	C15	Rye et al., "Depth Dependence of Alkali Etching of Poly(tetrafluoroethylene): Effect of X-ray Radiation", Langmuir 1989, 5, pp. 1331-1334
	C16	Siperko et al., "Chemical and physical modification of fluoropolymer surfaces for adhesion enhancement: a review", J. Adhesion Sci. Technol., 1989 Vol. 3, No. 3, pp. 157-173
	C17	Briggs et al., "Electrical Discharge Treatment of Polypropylene Film", Polymer, 1983, Vol 24 pp. 47-52

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	C18	Gagnon et al., "Polymer Surface Reconstruction by Diffusion of Organic Functional Groups From and to the Surface", J. Appl., Polym. Sci., 1984, Vol. 29, pp. 4335-4340
	C19	Yamamoto et al., "Surface Grafting of Polyethylene by Mutual Irradiation in Methyl Acrylate Vapor. III. Quantitative Surface Analysis by X-Ray Photoelectron Spectroscopy", J. Polym. Sci., Polym. Phys. Ed., 1979, Vol. 17, pp. 1581-1590
	C20	Kise, et al., "Phase Transfer Catalysis in Dehydrofluorination of Poly (vinylidene Fluoride) by Aqueous Sodium Hydroxide Solutions", J. Polym. Sci. Poly. Chem. Ed., 1983, Vol. 21, pp. 3443-3451
	C21	Dias et al., "Synthesis of a Two-Dimensional Array of Organic Functional Groups: Surface-Selective Modifiocation of Poly(vinylidene fluoride), Macromolecules, 1984, 17, pp. 2529-2531
	C22	Kise, et al., "Dehydrochlorination of Poly (vinyl Chloride) by Aqueous Sodium Hydroxide Solution Under Two-Phase Conditions", J. Poly. Sci. Poly. Chem. Ed., 1982, Vol. 20, pp. 3189-3197.
	C23	Yoshino et al., "Conducting Polymer Prepared from Teflon", Japanese Journal of Applied Physics, 1982, Vol. 21, No. 5, pp. 301-302
	C24	ASTM D 1876-01 "Standard Test Method for Peel Resistance of Adhesives (T-Peel Test), 2001, pp. 1-3
	C25	Sherman, "NPE News Wrap-Up: Engineering Thermoplastics", Plastics Technology Online, August 2000, [retrieved from the internet on September 23, 2003], <www.plasticstechnology.com>, pp. 1-7

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